



Lightning Protection

In the photo, an airplane's wingtip tank is being struck by simulated lightning in a test conducted by Lightning Technologies, Inc., Pittsfield, Massachusetts, a consulting firm specializing in design features to protect aircraft from the hazards of electrical phenomena. The firm's customers include several of the nation's leading manufacturers of private, business and commercial aircraft. Lightning simulations like the one pictured are employed to test the effectiveness of Lightning Technologies' protective measures.

Much of the technology employed by Lightning Technologies originated in NASA-sponsored studies. These studies, conducted with contractor assistance by Langley Research Center, Lewis Research Center

and Dryden Flight Research Center, focused on the effects of lightning on aircraft structures, electrical systems and fuel tanks, and on means of protecting against hazardous effects. As an employee of General Electric Company's High Voltage Laboratory, a NASA contractor, J. Anderson Plumer acquired 12 years experience in lightning investigations. In 1977, he left GE to form Lightning Technologies, of which he is president. Plumer is thus an example of a personnel-type spinoff, wherein NASA technology is transferred to the private sector in the course of an occupational shift by a scientist or engineer once engaged in NASA research activity.